



# **DVI Detective Plus**

**EXT-DVI-EDIDP**  
**User Manual**



**[www.gefen.com](http://www.gefen.com)**

# ASKING FOR ASSISTANCE

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## Notice

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# INTRODUCTION

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Computers and HDTV video source devices can sometimes lose the EDID -- the electronic identification of a display which lists its possible resolutions and frequencies. When displays are switched away or disconnected and then reconnected, the EDID can be lost and the computer or HD video source device can lose the ability to display the image properly. The DVI Detective Plus captures a display device's EDID and stores it.

## How It Works

Simply program the DVI Detective Plus for the display that you will use by performing a programming step while having the device connected to the display and a power adapter. Next put it into place on the video output of your video source and restart your equipment. When all sources and displays are powered on, seamless functioning of video source and display equipment will commence.

External buttons make EDID programming and settings operations a breeze -- formerly, some operations could require opening the unit.

# FEATURES

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## Features

- Store EDID information for displays
- Supports resolutions up to 1920x1200, 2K, and 3840x2400 (Dual Link)
- Keeps computer systems from deactivating inactive DVI ports
- Can eliminate CAT-5 lines used to carry DDC signals when extending computer video
- Passes HDCP copy-protection protocols for full HDTV, using an HDMI to DVI adapter (not included)
- No power required after initial programming

## Includes:

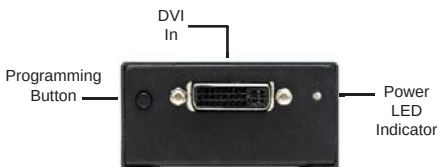
- (1) DVI Detective Plus
- (1) 1' DVI cable (m-m)
- (1) 5V DC Power Supply
- (1) User's Manual

**Note:** the supplied DVI-D cable does not support analog VGA.

# PANEL LAYOUT

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Front Panel



Back Panel



Front



Back

# CONNECTING AND OPERATING THE DVI DETECTIVE PLUS

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1. Before proceeding, please ensure that the write protect switch is in the E (write enabled) position and all SETTING DIP SWITCHES are in the OFF (down) position. Please see the diagram on the page 8.
2. Connect the display to the DVI Out port on the DVI Detective Plus. Turn on the display to ensure that an EDID is being transmitted.
3. Plug the supplied 5V DC power supply into the DVI Detective Plus. The power LED should be glowing either solid RED (an EDID is not programmed) or solid GREEN (an EDID is properly programmed).
4. Once you are ready to program the EDID, press and hold the Program button on the front panel of the DVI Detective Plus until the unit's LED begins to rapidly flash green. Once the recording sequence is initiated, release the button and wait until the LED glows a solid green color. A successful EDID programming sequence is indicated with a green LED while an unsuccessful EDID record is indicated with a red LED.

**NOTE:** If the unit does not initiate the recording sequence (indicated by a flashing green LED), please unplug the display and 5V DC power supply from the unit and repeat steps 2 and 3. If a solid red LED is indicated after several unsuccessful recording attempts, it is possible that the EDID recorded from the display is bad. Please refer to the section, USING A PRE-PROGRAMMED EDID on page 6 and 7 for instructions on how to use one of the built in EDIDs.

## CONNECTING AND OPERATING THE DVI DETECTIVE PLUS

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5. Once a successful EDID record is complete, remove the 5V DC power supply from the DVI Detective Plus. At this time, it is recommended that you write protect the DVI Detective Plus to prevent an accidental overwrite. Please see page 9 for instructions on this procedure.
6. If HDCP is required by the source, the display must also be HDCP compliant and DIP SWITCH 4 will have to be enabled for HDCP pass through to function. Please refer to your source and display manuals for HDCP compatibility and enable DIP SWITCH 4 appropriately.
7. The source should be powered off when connecting it to the DVI In port on the DVI Detective Plus.
8. Power on the source.

Note: If using a PC, restart your computer only after you've made all the connections.

## USING A PRE-PROGRAMMED EDID

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The DVI Detective Plus includes 5 built-in manually-selectable generic EDIDs (display identities) for forcing several standard home theater setups with multi-channel audio and standard HDTV resolutions. This functionality is vital when equipment reaches a state of indeterminate function and will not respond to signals or controls properly, and a certain resolution size with specific audio must be forced upon all connected equipment. On the next two pages are tables with the listed resolutions, refresh rates, and audio channels for each pre-programmed EDID. Once the desired EDID is chosen, use the steps below to program the DVI Detective Plus.

1. Choose the desired EDID from the table above and enable the corresponding DIP SWITCHES.
2. Remove any DVI cables and power supplies attached to the DVI Detective Plus.
3. Follow steps 3 through 8 in the section CONNECTING AND OPERATING THE DVI DETECTIVE PLUS (Page 4 and 5)

**NOTE:** Only when the DIP SWITCHES are set in the combinations above will an pre-programmed EDID be written to the DVI Detective Plus. Please set all DIP SWITCHES to the OFF (down) position to enable the default setting and record an EDID from an attached display.

# USING A PRE-PROGRAMMED EDID

| EDID | Resolutions - Aspect Ratio |                   |  | Refresh Rate | Audio                | Setting DIP SWITCHES |     |     |     |
|------|----------------------------|-------------------|--|--------------|----------------------|----------------------|-----|-----|-----|
| 1    | 720 x 576p 4:3             | 720 x 576p 16:9   |  | 50 hz        | Linear PCM 2 Channel | 1                    | 2   | 3   | 4   |
|      | 1280 x 720p 16:9           | 1920 x 1080p 16:9 |  |              |                      | ON                   | OFF | OFF | N/A |
|      | 1920 x 1080i 16:9 (native) |                   |  |              |                      |                      |     |     |     |
| 2    | 720 x 480p 16:9            | 1440 x 480p 16:9  |  | 59.94/60 hz  | Linear PCM 2 Channel | 1                    | 2   | 3   | 4   |
|      | 1280 x 720p 16:9           | 1920 x 1080p 16:9 |  |              |                      | OFF                  | ON  | OFF | N/A |
|      | 1920 x 1080i 16:9 (native) |                   |  |              |                      |                      |     |     |     |
| 3    | 720 x 576p 4:3             | 720 x 576p 16:9   |  | 50 hz        | Linear PCM 8 Channel | 1                    | 2   | 3   | 4   |
|      | 1280 x 720p 16:9           | 1920 x 1080p 16:9 |  |              |                      | ON                   | ON  | OFF | N/A |
|      | 1920 x 1080i 16:9 (native) |                   |  |              |                      |                      |     |     |     |

# USING A PRE-PROGRAMMED EDID

| EDID | Resolutions - Aspect Ratio |                   |  | Refresh Rate | Audio                                                     | Setting DIP SWITCHES |     |    |     |
|------|----------------------------|-------------------|--|--------------|-----------------------------------------------------------|----------------------|-----|----|-----|
| 4    | 720 x 480p 16:9            | 1440 x 480p 16:9  |  | 59.94/60 hz  | Linear PCM 8 Channel                                      | 1                    | 2   | 3  | 4   |
|      | 1280 x 720p 16:9           | 1920 x 1080p 16:9 |  |              |                                                           | OFF                  | OFF | ON | N/A |
|      | 1920 x 1080i 16:9 (native) |                   |  |              |                                                           |                      |     |    |     |
|      |                            |                   |  |              |                                                           |                      |     |    |     |
| 5    | 720 x 480p 16:9            | 1440 x 480p 16:9  |  | 59.94/60 hz  | Linear PCM 2<br>Linear PCM 8<br>Linear DTS<br>Linear AC-3 | 1                    | 2   | 3  | 4   |
|      | 1280 x 720p 16:9           | 1920 x 1080i 16:9 |  |              |                                                           | ON                   | OFF | ON | N/A |
|      | 1920 x 1080p 16:9 (native) |                   |  |              |                                                           |                      |     |    |     |
|      |                            |                   |  |              |                                                           |                      |     |    |     |

## PRE-PROGRAMMED EDID DIAGRAM

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**Pre-Programmed  
EDID DIP SWITCHES**

The EDID switches on the left hand side of the unit are preset at the factory to provide the behavior shown in the chart on Page 8. This behavior can be custom fine-tuned to accomodate your audio/video displays by setting the small white plastic switches as shown in the chart.

When adjusting the switches, please use gentle force. A small pointed object such as a ballpoint pen tip or a mechanical pencil head is desirable when changing the position of the switches.

## WRITE PROTECTING THE DVI DETECTIVE

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**Write protection  
switch**

Once the DVI Detective is programmed and working, you can write protect the unit to prevent an accidental overwrite. This is done by simply moving the write protect switch to the D (write disabled) position. By default, the unit is shipped in the E (write enabled) position. This is done so that the unit is ready to be programmed right out of the box. Whenever the unit is going to be programmed, make sure that the switch is in the "E" position, otherwise the procedure will not work. The power LED will flash in alternating green and red colors to indicate that the DVI Detective Plus is currently write protected.

## SPECIFICATIONS

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|                                  |                          |
|----------------------------------|--------------------------|
| Video Amplifier Bandwidth .....  | 165 MHz                  |
| Maximum Range .....              | 1920 x 1200 x 60hz       |
| DVI Input/Output Connector ..... | DVI-I                    |
| Power Consumption .....          | 5 Watts (max.)           |
| Power Supply .....               | 5VDC                     |
| Dimensions .....                 | 2.6" W x 1.3" H x 1.7" D |
| Shipping Weight .....            | 1 Lb.                    |

# WARRANTY

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Gefen Inc. warrants the equipment it manufactures to be free from defects in material and workmanship.

If equipment fails because of such defects and Gefen Inc. is notified within two (2) year from the date of shipment, Gefen Inc. will, at its option, repair or replace the equipment, provided that the equipment has not been subjected to mechanical, electrical, or other abuse or modifications. The two year warranty is only valid on new products purchased as of January 2007. All products purchased before this date still retain their 1 year warranty.

Equipment that fails under conditions other than those covered will be repaired at the current price of parts and labor in effect at the of repair. Such repairs are warranted for ninety (90) days from the day of reshipment to the Buyer.

This warranty is in lieu of all other warranties expressed or implied, including without limitation, any implied warranty or merchantability or fitness for any particular purpose, all of which are expressly disclaimed. Please note that:

1. Proof of sale may be required in order to claim warranty.
2. Customers outside the US are responsible for shipping charges to and from Gefen.
3. Copper cables are limited to a 30 day warranty and cables must be in their original condition.

For the latest warranty coverage information, please visit Gefen's Warranty page at <http://www.gefen.com/kvm/aboutus/warranty.jsp>

## PRODUCT REGISTRATION

**Please register your product online by visiting Gefen at:  
<http://www.gefen.com/kvm/Registry/Registration.jsp>**

The information in this manual has been carefully checked and is believed to be accurate. However, Gefen Inc. assumes no responsibility for any inaccuracies that may be contained in this manual. In no event will Gefen Inc., be liable for direct, indirect, special, incidental, or consequential damages resulting from any defect or omission in this manual, even if advised of the possibility of such damages. The technical information contained herein regarding the DVI Detective Plus features and specifications is subject to change without notice.





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